your vessel's Certificate of Inspection. This periodic inspection will take the place of an annual inspection.

(1) You must contact the cognizant OCMI to schedule an inspection at a time and place which he or she approves. No written application is required.

(2) The scope of the periodic inspection is the same as that for the inspection for certification, as specified in § 31.10–15(b). The OCMI will ensure that the vessel is in satisfactory condition and fit for the service for which it is intended. If your vessel passes the periodic inspection, the marine inspector will endorse your vessel's current Certificate of Inspection.

(3) If the periodic inspection reveals deficiencies in your vessel's maintenance, you must make any or all repairs or improvements within the time period specified by the OCMI.

(4) Nothing in this subpart limits the marine inspector from conducting such tests or inspections he or she deems necessary to be assured of the vessel's seaworthiness.

[USCG–1999–4976, 65 FR 6499, Feb. 9, 2000]

§ 31.10–17a Certificate of Inspection: Conditions of validity.

To maintain a valid Certificate of Inspection, you must complete your annual and periodic inspections within the periods specified in § 31.10–17 (a) and (b) and your Certificate of Inspection must be endorsed.

[USCG–1999–4976, 65 FR 6500, Feb. 9, 2000]

§ 31.10–18 Firefighting equipment: General—TB/ALL.

(a) It shall be the duty of the owner, master, or person in charge of a tank vessel to require and have performed at least once in every 12 months, the tests and inspections of all hand portable fire extinguishers, semiportable fire extinguishing systems, and fixed fire extinguishing systems on board, as described in paragraphs (b), (c), and (d) of this section. The owner, master, or person in charge shall keep records of such tests and inspections showing the dates when performed, the number and/or other identification of each unit tested and inspected, and the name(s) of the person(s) and/or company conducting the tests and inspections. Such records shall be made available to the marine inspector upon request and shall be kept for the period of validity of the vessel's current certificate of inspection. Where practicable, these records should be kept in or with the vessel's logbook. The conduct of these tests and inspections does not relieve the owner, master, or person in charge of his responsibility to maintain this firefighting equipment in proper condition at all times.

(b) The following tests and inspections of portable fire extinguishing equipment shall be made:

TABLE 31.10–18(b)

Type unit	Test
Soda acid	Discharge. Clean hose and inside of extinguisher thoroughly. Recharge.
Foam	Discharge. Clean hose and inside of extinguisher thoroughly. Recharge.
Pump tank (water or antifreeze).	Discharge. Clean hose and inside of extinguisher thoroughly. Recharge with clean water or antifreeze.
Cartridge operated (water, antifreeze or loaded stream).	Examine pressure cartridge and replace if end is punctured or if cartridge is otherwise determined to have leaked or to be in unsuitable condition. Remove liquid, clean hose and inside of extinguisher thoroughly. Recharge with clean water, solution, or antifreeze. Insert charged cartridge.
Stored pressure (water, antifreeze or loaded stream).	See that pressure gage is in operating range. If not, or if seal is broken, weigh or otherwise determine that full charge is in extinguisher. Recharge if pressure is low or if extinguishing agent is needed.
Carbon dioxide	Weigh cylinders. Recharge if weight loss exceeds 10 percent of weight of charge. Inspect hose and nozzle to be sure they are clear.[1]
Dry chemical (cartridge-operated type).	Examine pressure cartridge and replace if end is punctured or if cartridge is otherwise determined to have leaked or to be in unsuitable condition. Inspect hose and nozzle to see if they are clear. Insert charged cartridge. Be sure dry chemical is freeflowing (not caked) and chamber contains full charge.
Dry chemical (stored pressure type).	See that pressure gage is in operating range. If not, or if seal is broken, weigh or otherwise determine that full charge of dry chemical is in extinguisher. Recharge if pressure is low or if dry chemical is needed.

TABLE 31.10–18(b)—Continued

Type unit	Test
Vaporizing liquid[2] (pump type).	Pump a few strokes into clean pail and replace liquid. Keep water out of extinguisher or liquid. Keep extinguisher completely full of liquid.
Vaporizing liquid[2] (stored pressure type).	See that pressure gage is in operating range. Weigh or check liquid level to determine that full charge of liquid is in extinguisher. Recharge if pressure is low or if liquid is needed.

[1] Cylinders must be tested and marked, and all flexible connections and discharge hoses of semi-portable carbon dioxide and halon extinguishers must be tested or renewed, as required by §§ 147.60 and 147.65 of this chapter.

[2] Vaporizing-liquid type fire extinguishers containing carbon tetrachloride or chlorobromomethane or other toxic vaporizing liquids shall be removed from all vessels.

(c) The following tests and inspections of fixed fire extinguishing equipment shall be made:

TABLE 31.10–18(c)

Type system	Test
Foam	Systems utilizing a soda solution must have that solution replaced. In all cases, ascertain that powder is not caked.
Carbon dioxide	Weigh cylinders. Recharge cylinder if weight loss exceeds 10 percent of the weight of the charge. Test time delays, alarms, and ventilation shutdowns with carbon dioxide, nitrogen, or other nonflammable gas as stated in the system manufacturer's instruction manual. Inspect hoses for damage or decay. Ensure that nozzles are unobstructed. Cylinders must be tested and marked, and all flexible connections on fixed carbon dioxide systems must be tested or renewed, as required by 46 CFR 147.60 and 147.65.
Halon 1301 and halocarbon.	Recharge or replace if weight loss exceeds 5 percent of the weight of the charge or if cylinder has a pressure gauge, recharge cylinder if pressure loss exceeds 10 percent adjusted for temperature. Test time delays, alarms, and ventilation shutdowns with carbon dioxide, nitrogen, or other nonflammable gas as stated in the system manufacturer's instruction manual. Inspect hoses for damage or decay. Ensure that nozzles are unobstructed. Cylinders must be tested and marked, and all flexible connections to Halon 1301 and halocarbon cylinders must be tested or renewed, as required by 46 CFR 147.60 and 147.65 or 147.67.
	NOTE: Halon 1301 system approvals have expired, but existing systems may be retained if they are in good and serviceable condition to the satisfaction of the Coast Guard inspector.
Inert gas	Recharge or replace cylinder if cylinder pressure loss exceeds 5 percent of the specified gauge pressure, adjusted for temperature. Test time delays, alarms, and ventilation shutdowns with carbon dioxide, nitrogen, or other nonflammable gas as stated in the system manufacturer's instruction manual. Ensure that nozzles are unobstructed. Cylinders must be tested and marked, and all flexible connections on fixed inert extinguishers must be tested or renewed, as required by 46 CFR 147.60 and 147.66.
Water mist	Maintain system in accordance with the maintenance instructions in the system manufacturer's design, installation, operation, and maintenance manual.

(d) Deck foam systems shall be tested at the inspection for certification and the periodic inspection by discharging foam for approximately 15 seconds from any nozzle designated by the marine inspector. It shall not be required to deliver foam from all foam outlets, but all lines and nozzles shall be tested with water to prove them to be clear of obstruction. Before the inspection for certification and periodic inspection of deck foam systems utilizing a mechanical foam system, a representative sample of the foam liquid shall be submitted to the manufacturer who will issue a certificate indicating gravity, pH, percentage of water dilution and solid content.

(e) At each inspection for certification, periodic inspection, and at such other times as considered necessary, the inspector shall determine that all fire extinguishing equipment is in suitable condition and that the tests and inspections required by paragraphs (b) through (i) of this section have been conducted. In addition, the marine inspector may require such tests as are considered necessary to determine the condition of the equipment.

(f) The marine inspector must check all fire extinguishing system piping, controls, valves, and alarms to ascertain that the system is in good operating condition. For carbon dioxide or clean agent systems as described in 46 CFR subpart 95.16, the marine inspector must:

(1) Verify that flow is continuous and that the piping and nozzles are unobstructed; and

(2) Verify that any discharge delays and pre-discharge alarms function properly during the flow test.

(g) The fire main system shall be operated and the pressure checked at the most remote and highest outlets by the marine inspector. All fire hose shall be subjected to a test pressure equivalent to the maximum pressure to which they may be subjected in service, but not less than 100 p.s.i. The marine inspector shall check that the hose couplings are securely fastened in accordance with the regulations of this subchapter.

(h) At each inspection for certification, periodic inspection, and at such other times as considered necessary, all carbon dioxide cylinders for fixed, semiportable, and portable systems shall be examined and replaced if any corrosion is found. They shall also be checked by weighing to determine their contents, and if found to be more than 10 percent under the required contents of carbon dioxide, they shall be recharged.

(i) Steam smothering lines shall be tested with at least 50 pounds per square inch of air pressure or by blowing steam through the lines at the working pressure and a survey made for detecting corrosion and defects using hammer test or such other means as may be necessary.

[CGFR 65–50, 30 FR 16662, Dec. 30, 1965, as amended by CGFR 68–32, 33 FR 5712, Apr. 12, 1968; CGD 84–044, 53 FR 7748, Mar. 10, 1988; USCG-1999–4976, 65 FR 6500, Feb. 9, 2000; USCG–2006–24797, 77 FR 33872, June 7, 2012]

§ 31.10–18a Liquefied gas vessels: additional firefighting equipment inspections.

(a) Once during each 12 month period after the month an original Certificate of Inspection is issued for a liquefied gas vessel under § 31.05–1, the master shall ensure that the firefighting systems required in part 154 of this chapter for a liquefied gas vessel meets the following:

(1) The exterior water spray system must past a water spray test.

(2) The dry chemical system must meet the manufacturer's specifications for—

(i) The amount of dry chemical powder; and

(ii) The pressure for nitrogen bottles.

(3) The piping, valves, and controls of the system must be operable.

(b) On the same date that the requirements under paragraph (a) of this section are met, the master shall record in the vessel's official logbook the following information:

(1) The date of the inspection.

(2) The identification of each device inspected.

(3) The name of the inspector.

[CGD 74–289, 44 FR 26006, May 3, 1979]

§ 31.10–19 All firefighting equipment may be tested—TB/ALL.

(a) During the inspection of firefighting equipment, the Officer in Charge, Marine Inspection, may require fire apparatus to be tested, and used, except as provided under §§ 31.10–18(h) and 34.15–90(a) of this subchapter.

(b) [Reserved]

§ 31.10–20 Definitions relating to hull examinations—T/B ALL.

As used in this part—

(a) *Drydock examination* means hauling out of a vessel or placing a vessel in a drydock or slipway for an examination of all accessible parts of the vessel's underwater body and all through-hull fittings.

(b) *Internal structural examination* means an examination of the vessel while afloat or in drydock and consists of a complete examination of the vessel's main strength members, including the major internal framing, the hull plating, voids, and ballast tanks, but not including cargo or fuel oil tanks.

(c) *Cargo tank internal examination* means an examination of the vessel while afloat or in drydock and consists of an examination of the internals of all cargo tanks; except, if the vessel is certificated to carry cargoes regulated under part 38 or subchapter O of this chapter, the cargo tank internal examination must be accomplished as specified in parts 38 and 151 of this chapter respectively.

(d) *Underwater survey* means the examination, while the vessel is afloat, of